

CLAIM SUMMARY DOCUMENT

This listing of claims will replace all prior versions and listings of claims in this application.

1. (Currently Amended) A bumper apparatus for a vehicle comprising a bumper reinforcement made of extruded aluminum base alloy material being formed in a cross-section having two separated vertical portions, ~~an~~ a horizontal upper rib, an intermediate horizontal rib and a lower horizontal rib provided therebetween, each end of the upper, intermediate and lower horizontal ribs being connected to upper portions, middle portions and lower portions of the vertical portions respectively, wherein ~~the~~ a thickness of the intermediate rib is thicker than ~~the~~ thicknesses of the upper rib and the lower rib, ~~to make the upper rib and the lower rib be buckled to deform~~ buckling earlier than the intermediate rib when load is applied to the bumper apparatus, and the thickness of the intermediate rib is ~~not more than to make~~ less than a predetermined amount so that so that a strength of the bumper apparatus ~~be~~ ever is less than a vehicle body tolerable force.

2. (Currently Amended) A bumper apparatus for the vehicle according to [the] claim 1, thickness of the intermediate rib is 1.2 – 2.0 times thicker than the thicknesses of the upper rib and the lower rib.

3. (Currently Amended) A bumper apparatus for the vehicle according to [the] claim 1, wherein the upper rib and the lower rib have the same thickness.

4. (Currently Amended) A bumper apparatus for the vehicle according to [the] claim 1, wherein a crush box is fixed to the a vehicle body, and one side surface of the bumper reinforcement is fixed to the crush box through an intermediate plate provided therebetween.

5. (Currently Amended) A bumper apparatus for the vehicle according to [the] claim 2, wherein a crush box is fixed to the a vehicle body, and one side surface of the bumper reinforcement is fixed to the cursh box through the intermediate plate provided therebetween.

6. (Currently Amended) A bumper apparatus for vehicle according to [the] claim 4, wherein an impact energy is absorbed by deforming the upper rib and the lower rib, the intermediate plate member, the crush box in order, and finally the intermediate rib.

7. (Currently Amended) A bumper apparatus for vehicle according to [the] claim 5, wherein the impact energy is absorbed by deforming the upper rib and the lower rib, the intermediate plate member, the crush box in order, and finally the intermediate rib.